

## INVOLVING PARENTS IN THEIR CHILD'S MATH INSTRUCTION

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Knowing the importance of parent involvement and its influence on a child's learning, I have been looking for ways to encourage parents to take an active part in their child's mathematics education.

Several avenues have been explored. One way was a monthly newsletter that contained ideas and games to be tried at home that was co-ordinated with the current curriculum. Another idea was to explain manipulatives and games to parents during conference time and then send the materials home with parents to use with their children. Summer calendars with math activities and packets with manipulatives were also sent home to reinforce math concepts and skills and to encourage parent-child involvement.

All of these things helped, but I felt there was a need and an interest to further involve the parents and children. So many times at conferences, parents would make comments such as the following: "I would like to help my child, but I really was never any good at math" or "Math has changed so much since I was in school, I really don't understand it." Many parents seem to lack confidence in their math ability and have a negative attitude toward mathematics.

In the past several years, I had become aware of the Family Math materials from the University of California and have been anxious to try to involve parents and children in such a math class.

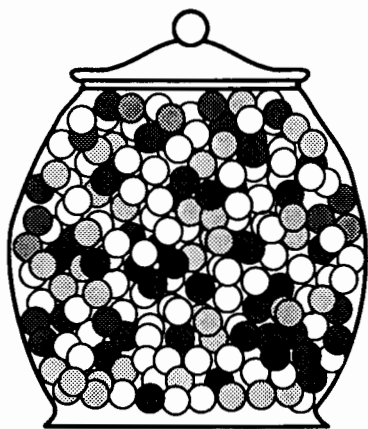
Last fall, I began a parent-child math group for grades 1-3. This group met for four evenings and the objective was to have parents become comfortable with mathematics and become aware of current math trends. I had hoped to have ten families involved in the program; instead, I had seventeen families. Several families

had a parent and two siblings so there was a total of about 45 people involved. Most of the students were first and second graders.

Before our session began the parents and children were given an attitude survey. The parents stated they were willing to spend twenty to sixty minutes a week helping their child, but they felt they didn't know enough about current math instruction or were insecure about their own math ability.

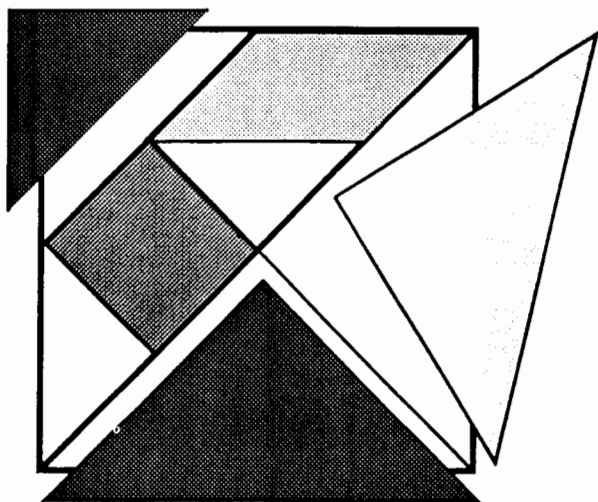
The children were also surveyed. Most of the students had a positive attitude toward math and felt confident about their ability in math. The things they liked most about math involved counting and addition activities. The thing they liked least was subtraction.

The format of the program was a meeting one evening a week for an hour. During that time the parents were given a brief introduction of the topic and then shown several activities to do with their children at home. After each activity was demonstrated, the parent and child were given an opportunity to practice their game and ask questions. At the end of the evening, the children had a snack while I talked with parents, distributed take-home materials, and answered questions.

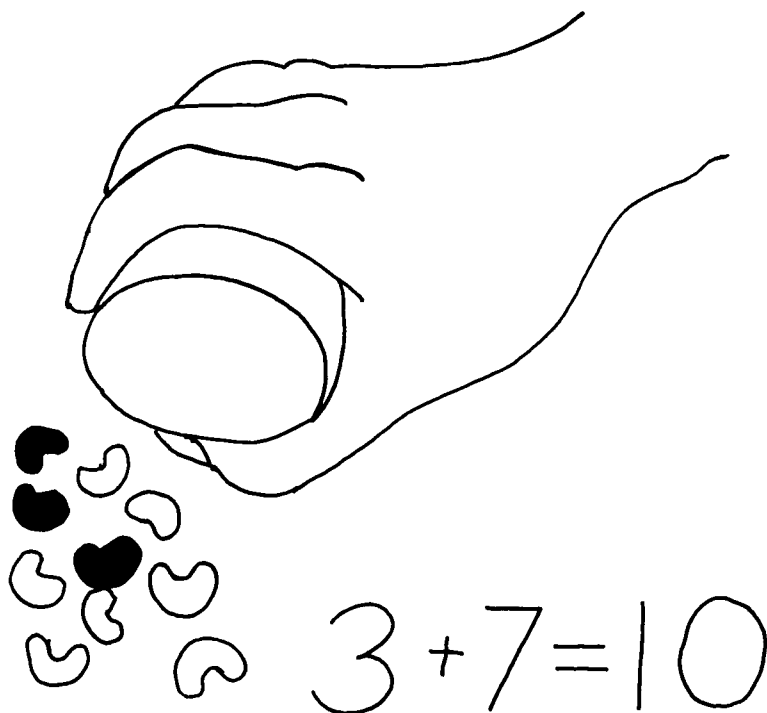


As a pre-activity each week, there was an estimation jar filled with things such as gumdrops, goldfish crackers, or pretzels. Each person would make a guess and the winner would be announced at the end of the evening. Families were given an estimation project to do at home, such as, estimate the number of shoes in your house and then count to check your answer. Another one was to estimate the number of times in a day the refrigerator door was opened.

The first evening's topic was spatial visualization. Tangrams and grid games were used as a way to introduce geometric ideas.



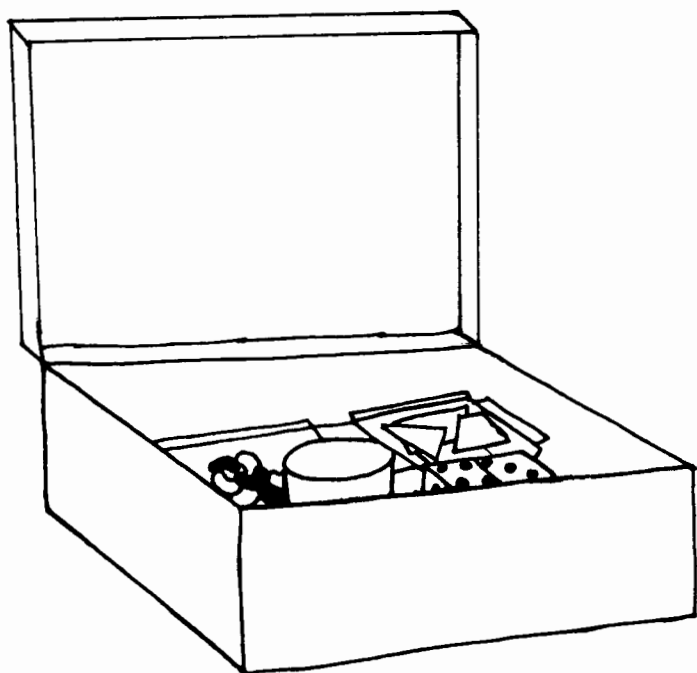
The second evening was spent on basic facts of addition and subtraction using manipulative materials. Odd and even counters and two-sided colored beans were used and various games were taught that could reinforce children's understanding of numbers and basic facts.



The third evening was spent on introductory experiences with a calculator. Students became familiar with the keyboard, adding 1 more, 1 less, and were shown some ways to practice basic math facts with the calculator.

The fourth evening centered around logical thinking and some measurement activities.

In addition to the handouts, each family received a "Math Toolbox" at our first session. The toolbox contained a tangram set, dice, odd and even counters, two-sided beans, and a deck of cards.



At the end of the four evenings the parents were asked to evaluate the program. All of the parents were positive about the classes. One parent wrote, "My child didn't realize he was learning, because it was so much fun." Another said, "Both my attitude and my child's were improved by this class. It was time well spent together. Thanks for a new way of looking at and teaching math, making it fun and very practical — not just the facts we learned in school." All of the parents surveyed also were interested in follow-up sessions.

Parent-child math nights are a rewarding experience. It gives the teacher an opportunity to get to know her students and parents in a relaxed and informal setting. It also provides the opportunity to explain the "Why" of mathematics. And most of all it created good feelings about mathematics.



#### REFERENCES

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